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| Under the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Paperwork Reduction Act of 1995, no persons are requ                                                                                                                                                    | Approved for use through 10/31/2002. OMB 0651-003 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC ired to respond to a collection of information unless it displays a valid OMB control numbe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |
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| Į į                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | UTILITY                                                                                                                                                                                                 | Attorney Docket No. RTI-133                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | APPLICATION                                                                                                                                                                                             | First Inventor Wironen                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |  |
| Γ<br>ω TRA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | NSMITTAL                                                                                                                                                                                                | Title QUANTITATIVE IN VITRO BONE INDUCTION ASSAY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |
| (Only for new nonprovisio                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | onal applications under 37 CFR 1.53(b))                                                                                                                                                                 | Express Mail Label No. ET112635794US                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ATION ELEMENTS cerning utility patent application contents.                                                                                                                                             | ADDRESS TO:  Assistant Commissioner for Patents Box Patent Application Washington, DC 20231                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |  |
| Applicant claims sm See 37 CFR 1.27.  3. X Specification (preferred arrangement set - Descriptive title of - Cross Reference to - Statement Regardin - Reference to seque or a computer prog - Background of the - Brief Summary of - Brief Description of - Detailed Description - Claim(s) - Abstract of the Dis  4. X Drawing(s) (35 U.S.  5. Oath or Declaration  a. Newly exec b. Copy from a (for continu)  i. DEL Signe name                                                                                                                                                                                                                                                                                                                       | [Total Pages 32]  It forth below)  The invention Related Applications ng Fed sponsored R & D mace listing, a table, ram listing appendix Invention the Invention of the Drawings (if filed) on  closure | 7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)  8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)  a. Computer Readable Form (CRF)  b. Specification Sequence Listing on:  i. CD-ROM or CD-R (2 copies); or  ii. paper  c. Statements verifying identity of above copies  ACCOMPANYING APPLICATION PARTS  9. Assignment Papers (cover sheet & document(s))  10. 37 CFR 3.73(b) Statement (when there is an assignee)  11. English Translation Document (if applicable)  12. Information Disclosure Statement (IDS)/PTO-1449  13. Preliminary Amendment  14. X (Should be specifically itemized)  15. (if foreign priority is claimed)  16. (b)(2)(B)(i). Applicant must attach form PTO/SB/35 |  |  |  |  |  |  |
| 6. Application Data Sh                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | neet. See 37 CFR 1.76                                                                                                                                                                                   | or its equivalent.  Other:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |
| 18 If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:  Continuation Divisional Continuation-in-part (CIP) Of prior application No  Prior application information: Examiner Group Art Unit.  For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. |                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 19. CORRESPOND                                                                                                                                                                                          | DENCE ADDRESS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |
| Customer Number or B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ar Code Label (Insert Customer No. or Attach b                                                                                                                                                          | or Correspondence address below                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |  |  |  |
| Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Timothy H. Van Dyke                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |  |  |  |
| Address                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Bencen & Van Dyke, P.A., 1630 Hillcres                                                                                                                                                                  | st Street, Orlando, FL 32803 USA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |
| Telephone                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 407-228-0328 Fax 407-228-                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |  |  |  |
| I hereby certify that this corresp<br>sufficient postage under 37 CFI<br>Washington, D.C. 20231                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | pondence is being deposited with the United Sta<br>R 1.10 on the date indicated below and is addre                                                                                                      | ttes Postal Service "Express Mail Post Office to Addressee" service with ssed to: Assistant Commissioner for Patents, Box Patent Application,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |
| Br Zach                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Express Mail No: <u>ET1</u>                                                                                                                                                                             | 12635794US Date 7-2-0001                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |

Name (Print/type) Timothy H. Van Dyke Registration No. (Attorney/Agent) 43218

Signature Date 7-2-2001

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## FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT

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| Complete if Known    |           |  |  |  |  |
|----------------------|-----------|--|--|--|--|
| Application Number   | N/A       |  |  |  |  |
| Filing Date          | 6/28/2001 |  |  |  |  |
| First Named Inventor | Wironen   |  |  |  |  |
| Examiner Name        | Unknown   |  |  |  |  |
| Group Art Unit       | Unknown   |  |  |  |  |
| Attorney Docket No.  | RTI-133   |  |  |  |  |

| METHOD OF PAYMENT                                                                              |                                                                   |                           |                         |                                            | FEE CALCULATION (continued) |             |                                           |             |                 |                                                                                                |          |
|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|---------------------------|-------------------------|--------------------------------------------|-----------------------------|-------------|-------------------------------------------|-------------|-----------------|------------------------------------------------------------------------------------------------|----------|
| The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to: |                                                                   |                           |                         | <b>3.</b> A                                | ADDIT                       | IONA        |                                           | S           |                 |                                                                                                |          |
|                                                                                                | ^                                                                 | ous and or                | an uniy o               | respuyments to:                            |                             |             | Large<br>Entity                           |             | Small<br>Entity |                                                                                                |          |
| Depos<br>Accou<br>Numb                                                                         | int                                                               |                           |                         |                                            |                             | Fee<br>Code | Fee<br>(\$)                               | Fee<br>Code | Fee<br>(\$)     | Fee Description                                                                                | Fee Paid |
| Depos<br>Accou<br>Name                                                                         | ınt                                                               |                           |                         |                                            |                             | 105         | 130                                       | 205         | 65              | Surcharge - late filing fee or oath                                                            |          |
|                                                                                                | Charge Any Additional Fee Required Under 37 CFR 1 16 and 1 17     |                           |                         |                                            |                             | 127         | 50                                        | 227         | 25              | Surcharge – late provisional filing fee sheet                                                  | or cover |
|                                                                                                |                                                                   | plicant clair<br>37 CFR 1 |                         | tity status                                |                             | 139         | 130                                       | 139         | 130             | Non-English specification                                                                      |          |
| 2.                                                                                             | Pa                                                                | yment I                   | Inclose                 | d:                                         |                             | 147         | 2,520                                     | 147         | 2,520           | For filing a request for ex parte reexamin                                                     | nation   |
|                                                                                                |                                                                   | eck                       | Credit C                | Monovi                                     | Other                       | 112         | 920*                                      | 112         | 920*            | Requesting publication of SIR prior to Examiner action                                         |          |
|                                                                                                |                                                                   | F                         | EE CA                   | LCULATION                                  |                             | 113         | 1,840*                                    | 113         | 1,840*          | Requesting publication of SIR after Examiner action                                            |          |
| 1. B                                                                                           | ASIC                                                              | FILING                    | FEE                     |                                            |                             | 115         | 110                                       | 215         | 55              | Extension for reply within first month                                                         |          |
|                                                                                                | e Entity                                                          |                           | ll Entity               |                                            |                             | 116         | 390                                       | 216         | 195             | Extension for reply within second mon                                                          | th       |
| Fee<br>Code                                                                                    | Fee<br>(\$)                                                       |                           | Fee<br>(\$)             | Fee Description                            | Fee Paid                    | 117         | 890                                       | 217         | 445             | Extension for reply within third month                                                         |          |
| 101                                                                                            | 710                                                               | 0 201                     | 355                     | Utility filing fee                         | 710.00                      | 118         | 1,390                                     | 218         | 695             | Extension for reply within fourth mont                                                         | h        |
| 106                                                                                            | 320                                                               | 206                       | 160                     | Design filing fee                          |                             | 128         | 1,890                                     | 228         | 945             | Extension for reply within fifth month                                                         |          |
| 107                                                                                            | 490                                                               | 207                       | 245                     | Plant filing fee                           |                             | 119         | 310                                       | 219         | 155             | Notice of Appeal                                                                               |          |
| 108                                                                                            | 710                                                               | 208                       | 355                     | Reissue filing fee                         |                             | 120         | 310                                       | 220         | 155             | Filing a brief in support of an appeal                                                         |          |
| 114                                                                                            | 150                                                               | 214                       | 75                      | Provisional filing fee                     |                             | 121         | 270                                       | 221         | 135             | Request for oral hearing                                                                       |          |
|                                                                                                |                                                                   |                           | 138                     | 1,510                                      | 138                         | 1,510       | Petition to institute a public use procee | ding        |                 |                                                                                                |          |
|                                                                                                |                                                                   |                           |                         |                                            | 710.00                      | 140         | 110                                       | 240         | 55              | Petition to revive – unavoidable                                                               |          |
| 2. E                                                                                           | XTRA                                                              | A CLAIN                   | 1 FEES                  |                                            |                             | 141         | 1,240                                     | 241         | 620             | Petition to revive – unintentional                                                             |          |
|                                                                                                |                                                                   |                           | Ext                     | ra Claims Fee from<br>Below                | Fee Paid                    | 142         | 1,240                                     | 242         | 620             | Utility issue fee (or reissue)                                                                 |          |
|                                                                                                | Claims                                                            | 36                        | -20**=                  | 16 x 18.00                                 | = 288.00                    | 143         | 440                                       | 243         | 220             | Design issue fee                                                                               |          |
| Clain                                                                                          | endent<br>18                                                      | 7                         | - 3**=                  | 4 X 80.00                                  | = 320.00                    | 144         | 600                                       | 244         | 300             | Plant issue fee                                                                                |          |
| Multi                                                                                          | ple Depe                                                          | endent                    |                         |                                            |                             | 122         | 130                                       | 122         | 130             | Petitions to the Commissioner                                                                  |          |
|                                                                                                |                                                                   |                           |                         |                                            |                             | 123         | 50                                        | 123         | 50              | Processing fee under 37 CFR 1.17(q)                                                            |          |
| Large<br>Fee<br>Code                                                                           | e Entity<br>Fee<br>(\$)                                           | y Smal<br>Fee<br>Code     | l Entity<br>Fee<br>(\$) | Fee Des                                    | cription                    | 126         | 180                                       | 126         | 180             | Submission of Information Disclosure                                                           | Stmt     |
| 10                                                                                             |                                                                   | 18 203                    |                         | Claims in excess of 2                      | 20                          | 581         | 40                                        | 581         | 40              | Recording each patent assignment per patent assignment per patent (times number of properties) | property |
| 10                                                                                             | )2                                                                | 80 202                    | 40                      | Independent claims i                       | n excess of 3               | 146         | 710                                       | 246         | 355             | Filing a submission after final rejection CFR § 1.129(a))                                      | (37      |
| 10                                                                                             | 4 2                                                               | 70 204                    | 135                     | Multiple dependent cl                      | aim, if not paid            | 149         | 710                                       | 249         | 355             | For each additional invention to be exa (37 CFR § 1.129(b))                                    | mined    |
| 10                                                                                             | 19                                                                | 80 209                    | 40                      | **Reissue independe<br>original patent     | nt claims over              | 179         | 710                                       | 279         | 355             | Request for Continued Examination (R                                                           | CE)      |
| 11                                                                                             | 0 :                                                               | 18 210                    | 9                       | **Reissue claims in<br>over original paten | excess of 20 and<br>t       | 169         | 900                                       | 169         | 900             | Request for expedited examination of a design application                                      |          |
|                                                                                                |                                                                   |                           | SUBTO                   | TAL (2) (\$) 60                            | 8.00                        | Other fe    | e (specif                                 | ý) _        |                 |                                                                                                |          |
|                                                                                                | ** or number previously paid, if greater; For Reissues, see above |                           |                         |                                            |                             | *Reduced    | l by Basic                                | Filing Fee  | Paid            | SUBTOTAL (3)                                                                                   | (\$)0.00 |

| SUBMITTED BY      | Complete (if ap    | Complete (if applicable)            |       |           |              |   |
|-------------------|--------------------|-------------------------------------|-------|-----------|--------------|---|
| Name (Print/Type) | Timothy H. Van Dyk | Registration No<br>(Attorney/Agent) | 43218 | Telephone | 407-228-0328 | _ |
| Signature         | - Chall            |                                     |       | Date      | 7-2-2001     | _ |

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